

**AGREEMENT BETWEEN
THE GOVERNMENT OF THE UNITED STATES OF AMERICA
AND
THE GOVERNMENT OF THE REPUBLIC OF INDIA**

**ON TECHNOLOGY SAFEGUARDS
AT ALL FACILITIES UNDER THE JURISDICTION AND/OR CONTROL OF
THE GOVERNMENT OF THE REPUBLIC OF INDIA ASSOCIATED WITH THE
LAUNCH OF U.S. LICENSED SPACECRAFT**

The Government of the United States of America and the Government of the Republic of India (hereinafter referred to as "the Parties"),

RECOGNIZING the deepening nature of the strategic partnership between the United States and the Republic of India, and significant advances in cooperation in civil space activities that have occurred recently between the two countries, and the likelihood that this cooperation will continue to expand in the future, and

DESIRING to build further on that cooperation, and to continue to promote their mutual interests in protecting advanced technologies with respect to international projects of cooperation in space launches from all facilities under the jurisdiction and/or control of the Government of Republic of India,

HAVE AGREED as follows:

Article 1
Purpose & Scope

- 1.1 This Agreement is entered into for the purpose of facilitating the launching of U.S. - licensed Spacecraft from all facilities under the jurisdiction and/or control of the Government of Republic of India and safeguarding protected technologies of either Party associated with such a launch.
- 1.2 This Agreement shall not apply to Spacecraft of the Government of the United States of America.

Article 2
Definitions

For the purposes of this Agreement, the following definitions shall apply:

- 2.1 "Spacecraft" means any spacecraft, groups of spacecraft, spacecraft systems or subsystems, spacecraft components (including satellites, groups of satellites, satellite systems or subsystems, and/or satellite components), and/or orbital transfer motors authorized for export by the Government of the United States of America and used to carry out Launch Activities.
- 2.2 "Launch Vehicles" means any launch vehicles, boosters, adapters with separation systems, payload nose fairings, and/or components thereof controlled by India or Indian entities and used to carry out Launch Activities.
- 2.3 "Related Equipment" means support equipment, ancillary items, components and spare parts thereof required to carry out Launch Activities.
- 2.4 "Technical Data" means information, in any form, including in oral form, other than publicly available information, that is required for the design, engineering, development, production, processing, manufacture, use, operation, overhaul, repair, maintenance, modification, enhancement or modernization of Spacecraft and U.S. Related Equipment (hereinafter "U.S. Technical Data"), and information in any form, including in oral form, other than publicly available information, that is required for the design, engineering, development, production, processing, manufacture, use, operation, overhaul, repair, maintenance, modification, enhancement or modernization of Launch Vehicles and Indian Related Equipment (hereinafter "Indian Technical Data"). Such information includes, but is not limited to, information in the form of blueprints, drawings, photographs, video materials, plans, instructions, computer software, and documentation.
- 2.5 "Launch Activities" means all actions associated with the launching of Spacecraft by means of Launch Vehicles, from the initial technical discussions through launch and return of the U.S. Related Equipment and U.S. Technical Data from India to the United States of America or other location approved by the Government of the United States of America, and, in the event of a canceled or failed launch, the return of Spacecraft, U.S. Related Equipment, U.S. Technical Data, and/or any discovered and identified Spacecraft components and/or debris to the United States of America or other location approved by the United States Government; and return of Launch Vehicles, Indian Related Equipment

and Indian Technical Data from the United States of America to India or other location approved by the Government of Republic of India.

- 2.6 "Technology Security Plan" means a plan developed jointly by the U.S. Consignees and the Indian Consignees in accordance with Article 5 of this Agreement, with, if necessary, the participation of persons of third states or representatives of international organizations using Spacecraft licensed for export by the United States of America or Launch Vehicles licensed for export by India or whose export is otherwise authorized by the Government of Republic of India, which are approved by the relevant agencies of the Government of the United States of America and the Government of Republic of India before delivery of Spacecraft to the territory of the Republic of India, and which outline security measures to be implemented during Launch Activities, including in emergency situations.
- 2.7 "U.S. Participants" means any U.S. Consignees, their contractors, subcontractors, employees or agents, whether persons of the United States of America or other persons, or any Government of the United States of America officials or contractors, subcontractors, employees, or agents, whether persons of the United States of America or other persons, who, in connection with the issuance of a U.S. export license, participate in Launch Activities, and are subject to the jurisdiction and/or control of the United States of America, as well as persons of third states or representatives of international organizations that use Spacecraft and, in connection with the issuance of a U.S. export license, participate in Launch Activities.
- 2.8 "Indian Representatives" means any persons (including but not limited to Indian Consignees, their contractors, subcontractors, employees or agents), other than U.S. Participants, whether persons of the Republic of India or other persons, who are authorized to have access to Spacecraft, U.S. Related Equipment, and/or U.S. Technical Data, who are subject to the jurisdiction and/or control of India.
- 2.9 "U.S. Consignees" means any person or persons issued (an) export license(s) pursuant to U.S. laws and regulations to export Spacecraft, U.S. Related Equipment, and/or U.S. Technical Data to India.
- 2.10 "Indian Consignees" means any person or persons authorized under the laws and regulations of the Republic of India to carry out Launch Activities and who are identified on the relevant U.S.-issued export license(s).
- 2.11 "Launch Related Facilities" means any facility under the jurisdiction and/or control of the Government of Republic of India associated with the launch of U.S. licensed Spacecraft, including "launch pad" and "technical complexes".

Article 3 General Provisions

- 3.1 This Agreement specifies the technology safeguards procedures to be followed for launches of Spacecraft, including procedures for controlling access to Spacecraft, Launch Vehicles, Related Equipment, Technical Data, and Launch Related Facilities. This Agreement shall apply to all phases of Launch Activities, including activities at all facilities of the U.S.

Consignees, activities at Launch Related Facilities and activities of Indian Representatives and U.S. Participants. This Agreement also shall apply to all phases of transportation of Spacecraft, U.S. Related Equipment, and/or U.S. Technical Data.

- 3.2 Except as described in Article 4 and in Article 8.3 of this Agreement, or as authorized in advance by export licenses issued by the Government of the United States of America, or as otherwise authorized in advance by the Government of the United States of America, the Government of Republic of India shall take all necessary measures to prevent unescorted or unmonitored access, including through any technical means, by Indian Representatives to Spacecraft, U.S. Related Equipment and/or U.S. Technical Data.
- 3.3 Except as described in Article 4 and in Article 8.3 of this Agreement, or as authorized in advance by the Government of Republic of India, the Government of the United States of America shall take all necessary measures to prevent unescorted or unmonitored access, including through any technical means, by U.S. Participants to Launch Vehicles, launch pads and technical complexes, Indian Related Equipment and/or Indian Technical Data.
- 3.4 For any Launch Activities, the Parties shall take all necessary measures to ensure that:
 - 3.4.1 Indian Representatives retain control of Launch Vehicles, launch pads and technical complexes, Indian Related Equipment and Indian Technical Data, unless otherwise authorized by the Government of Republic of India; and that
 - 3.4.2 U.S. Participants retain control of Spacecraft, U.S. Related Equipment, and U.S. Technical Data, unless otherwise authorized by the Government of the United States of America.
- 3.5 For any launch covered by this Agreement, the Parties shall oversee and monitor implementation of Technology Security Plans.
- 3.6 Each Party shall ensure that all persons under its jurisdiction and/or control who participate in or otherwise have access to Launch Activities shall adhere to the procedures specified in this Agreement. In addition, the Government of Republic of India shall ensure that Indian Representatives comply with the obligations set forth in Technology Security Plans. The Government of the United States of America shall ensure that U.S. Participants comply with the obligations set forth in Technology Security Plans. In the event of conflict between the provisions of this Agreement and the provisions of any Technology Security Plans, the provisions of this Agreement shall prevail.
- 3.7.1 The Government of the United States of America shall use its best efforts to ensure continuity of the U.S. license(s) for the completion of Launch Activities. If the Government of the United States of America determines that any provision of this Agreement or Technology Security Plans for any Launch Activities may have been violated, it may suspend or revoke any export license(s) related to such launches.
- 3.7.2 In the event that any such export license(s) is (are) suspended or revoked, the Government of the United States of America shall promptly notify the Government of Republic of India and explain the reasons for its decision.

- 3.7.3 In the event the Government of the United States of America revokes its export license, the Government of Republic of India shall not interfere with and, if necessary, shall facilitate the expeditious return to the United States of America or other location approved by the Government of the United States of America, in accordance with the terms of such export license, of Spacecraft, U.S. Related Equipment, and U.S. Technical Data that were brought into the territory of the Republic of India.
- 3.7.4 In the event the Government of the United States of America revokes its export license, the Government of the United States of America shall not interfere with and, if necessary, shall facilitate the expeditious return to the Republic of India or other location approved by the Government of Republic of India, of Launch Vehicles, Indian Related Equipment, and Indian Technical Data that were brought into the territory of the United States of America.
- 3.7.5 Nothing in this Agreement shall restrict the authority of the Government of the United States of America to take any action with respect to export licensing consistent with the laws, regulations and policies of the United States of America.
- 3.8.1 The Government of Republic of India shall use its best efforts to ensure continuity of the Indian license(s) for completion of Launch Activities. If the Government of Republic of India determines that any provision of this Agreement, or Technology Security Plans for any Launch Activities may have been violated, it may suspend or revoke any license(s) related to such launches.
- 3.8.2 In the event that any such license(s) is (are) suspended or revoked, the Government of Republic of India shall promptly notify the Government of the United States of America and explain the reasons for its decision.
- 3.8.3 In the event the Government of Republic of India revokes its license, the Government of the United States of America shall not interfere with and, if necessary, shall facilitate the expeditious return to the Republic of India or other location approved by the Government of Republic of India, of Launch Vehicles, Indian Related Equipment, and Indian Technical Data that were brought into the territory of the United States of America.
- 3.8.4 In the event the Government of Republic of India revokes its license, the Government of Republic of India shall not interfere with and, if necessary, shall facilitate the expeditious return to the United States of America or other location approved by the Government of the United States of America of Spacecraft, U.S. Related Equipment, and U.S. Technical Data that were brought into the territory of the Republic of India.
- 3.8.5 Nothing in this Agreement shall restrict the authority of the Government of Republic of India to take any action with respect to licensing consistent with the laws, regulations, and policies of India.

Article 4

Technical Data Authorized for Disclosure

- 4.1.1 Subject to U.S. export licenses and approvals, the Government of the United States of America shall authorize the U.S. Consignees to transmit

only that U.S. Technical Data to the Government of Republic of India and/or Indian Representatives necessary to integrate the spacecraft with the launch vehicle, and to ensure the successful launch and insertion of the spacecraft into orbit. This Technical Data shall include but may not be limited to:

- 4.1.1.1 orbit parameters; launch window;
- 4.1.1.2 interface form, fit, and function technical data that describe mechanical and electrical mating parameters for attaching Spacecraft to Launch Vehicles;
- 4.1.1.3 dimensional values; mass; center of gravity; envelope type; dynamic loading; power usage and conditioning; interface adapter requirements;
- 4.1.1.4 data pertaining to the existence or absence of devices and/or components using radioactive elements and/or ionizing, sonic, or electromagnetic radiation sources, on Spacecraft and/or U.S. Related Equipment;
- 4.1.1.5 ecological data pertaining to explosion and fire safety and to the presence on Spacecraft of elements that are toxic or otherwise hazardous to human life and health or the environment;
- 4.1.1.6 propellant parameters; operating frequency plans, including telemetry, tracking, and control; safety system information; test data; separation characteristics; ground handling/test equipment and test/flight and launch schedules.

4.1.2 Requests for additional U.S. Technical Data must be directed to the Department of State of the United States of America in accordance with normal export license procedures.

4.1.3 This Agreement does not permit, and the Government of the United States of America shall prohibit, U.S. Participants from providing any assistance relating to the design, development, production, operation, maintenance, modification, enhancement, modernization, or repair of Launch Vehicles unless such assistance is specifically authorized by the Government of the United States of America and applicable export licenses are obtained. This Agreement does not permit the disclosure of any information related to U.S. launch vehicles, boosters, adapters with separation systems, payload nose fairings, and/or components thereof by U.S. Participants or any U.S. persons.

4.2.1 The Government of Republic of India shall authorize the Indian Consignees to transmit to the Government of the United States of America and to U.S. Participants only the Indian Technical Data necessary to integrate the spacecraft with the launch vehicle, and to ensure the successful launch and insertion of the spacecraft into orbit.

4.2.2 The specific list and volume of Indian Technical Data to be transmitted shall be subject to approval by the authorized agencies of the Government of Republic of India designated in accordance with Article 9 of this Agreement.

4.2.3 Requests for the transfer of additional Indian Technical Data must be directed to the Government of Republic of India through the authorized agencies of the Government of Republic of India designated in accordance with Article 9 of this Agreement.

- 4.2.4 This Agreement does not permit, and the Government of Republic of India shall prohibit, Indian Representatives from providing any assistance relating to the design, development, production, operation, maintenance, modification, enhancement, modernization, or repair of Spacecraft unless such assistance is specially authorized by the Government of Republic of India. This Agreement does not permit the disclosure of any information related to Indian spacecraft, groups of spacecraft, spacecraft systems or subsystems, spacecraft components (including satellites, groups of satellites, satellite systems or subsystems, and/or satellite components), and/or orbital transfer motors by Indian Representatives and/or any persons of the Republic of India.
- 4.3.1 The Government of Republic of India shall not retransfer and shall prohibit the retransfer by Indian Representatives of any U.S. Technical Data referred to in paragraph 4.1.1 of this Article without the prior written approval of the Government of the United States of America. The Government of Republic of India shall not use and shall take the necessary measures to ensure that Indian Representatives do not use U.S. Technical Data for purposes other than purposes specified in the U.S. license information and/or Government of the United States of America retransfer authorization information provided by the U.S. Consignees to the Indian Consignees.
- 4.3.2 The Government of the United States of America shall take the necessary measures to ensure that the U.S. Consignees provide the Indian Consignees with the necessary information from the U.S. license and/or Government of the United States of America retransfer authorization. The Government of Republic of India shall take the necessary measures to ensure that the Indian Consignees provide the Government of Republic of India with the aforementioned information.
- 4.4.1 The Government of the United States of America shall not retransfer and shall prohibit the retransfer by U.S. Participants of any Indian Technical Data referred to in paragraph 4.2.1 of this Article without the prior written approval of the Government of Republic of India. The Government of the United States of America shall not use and shall take the necessary measures to ensure that U.S. Participants do not use Indian Technical Data for purposes other than purposes specified in the Indian license information and/or information from other relevant Indian Government authorizations, which is provided by the Indian Consignees to the U.S. Consignees.
- 4.4.2 The Government of Republic of India shall take the necessary measures to ensure that the Indian Consignees provide the U.S. Consignees with the necessary information from the Indian licenses and/or information from other relevant Indian Government authorizations. The Government of the United States of America shall take the necessary measures to ensure that the U.S. Consignees provide the Government of the United States of America with the aforementioned information.

Article 5

Technology Security Plans

- 5.1 The Parties shall, in accordance with their respective national laws and regulations, take measures to ensure that a Technology Security Plan, is developed and implemented to prevent unauthorized transfer of

technologies. The Technology Security Plan shall include, but not be limited to, provisions addressing the following:

- 5.1.1 Access controls related to specific launch activities;
- 5.1.2 Technology or data authorized for disclosure;
- 5.1.3 Emergency action plans;
- 5.1.4 Procedures to be followed in the event of delay, cancellation or failure; and
- 5.1.5 Where monitoring is identified and/or required by the laws and regulations of the Government of the United States of America, monitoring of the U.S. Consignees' conduct by U.S. Government representatives, including timely access to all locations where U.S. Consignees conduct singular or joint activities under this Agreement.

Article 6

Access Controls

- 6.1 The Government of Republic of India shall permit and facilitate oversight and monitoring of Launch Activities by the Government of the United States of America under the conditions stipulated by this Agreement.
- 6.2 The Parties shall ensure that only those U.S. Participants whose authority to apply technology safeguards procedures has been approved by the Government of the United States of America, shall, on a 24-hour basis, control access to Spacecraft, U.S. Related Equipment, and U.S. Technical Data, throughout Spacecraft transportation, launch preparations, mating/demating, test and checkout, Spacecraft launch, and return of U.S. Related Equipment and U.S. Technical Data to the United States of America or other location approved by the Government of the United States of America.
- 6.3 Officials of the Government of the United States of America present at all Launch Related Facilities in connection with Launch Activities shall have unimpeded access at all times to inspect Spacecraft and U.S. Related Equipment at facilities that are exclusively set aside for work with Spacecraft, and to check, at these facilities, the U.S. Technical Data that is provided by the U.S. Consignees to the Indian Representatives. The Government of the United States of America shall have the right to inspect and monitor, including electronically through a closed-circuit television system and other electronic devices compatible with conditions for preparation and launch of Launch Vehicles and compatible with launch safety requirements: all areas as set forth in the Technology Security Plans where U.S. Related Equipment and U.S. Technical Data are located, including the "especially clean" portion for working with Spacecraft after Spacecraft are mated with Launch Vehicles. The Government of the United States of America shall have the right to have U.S. Participants accompany Spacecraft along the route that Launch Vehicles with Spacecraft mounted on them may follow to launch pads. The Government of the United States of America shall take steps to ensure that the U.S. Consignees coordinate the specifications and technical characteristics of any electronic monitoring devices with Indian Consignees, and include such specifications and technical characteristics in the Technology Security Plans.
- 6.4 The Government of Republic of India shall give timely notice to the Government of the United States of America of any operations that may create a conflict between the access control and observation

requirements specified by the Parties so that suitable arrangements can be agreed to safeguard Spacecraft, U.S. Related Equipment, and U.S. Technical Data. The Government of Republic of India shall ensure that the U.S. Consignees' control of access to, and monitoring of, Spacecraft, U.S. Related Equipment, and U.S. Technical Data are not denied, and that such control and verification are not interrupted at any time. The Government of the United States of America will undertake all available measures to prevent U.S. Participants from interfering with the launch preparations, harming launch safety requirements, and/or from acquiring Indian technologies and/or information and data not connected with Launch Activities, the transfer of which is not authorized by the Government of Republic of India.

- 6.5 Identification criteria and access to the premises and areas set aside exclusively for work with Spacecraft under the exclusive control of the Government of the United States of America, and identification criteria and access to areas, facilities, and premises at all Launch Related Facilities that are not set aside for work exclusively with Spacecraft, shall be determined in the Technology Security Plans as outlined in Article 5.

Article 7

Customs, Passport, and Spacecraft Processing Procedures

- 7.1 **Spacecraft/Adapters Fit Check.** The Government of the United States of America shall ensure that Indian Representatives are permitted access to Spacecraft only as needed for test validation of adapters and shall ensure that they are escorted and monitored at all times by only those U.S. Participants whose authority to apply security procedures has been approved by the Government of the United States of America.

- 7.2 **Transportation of Spacecraft, U.S. Related Equipment, and U.S. Technical Data, including Customs Processing**

- 7.2.1 All transportation of Spacecraft, U.S. Related Equipment and U.S. Technical Data to or from the territory of India must be authorized in advance by the Government of the United States of America.

7.2.2.1

Inspection by Indian Customs of any Spacecraft, U.S. Related Equipment, and/or U.S. Technical Data transported to or from the territory of the Republic of India and packed in appropriately sealed containers shall be conducted:

- with reasonable prior notice to the Government of the United States of America;
- in the presence of U.S. Participants, unless exigent circumstances arise;
- by means of visual and/or the least intrusive methods to avoid and minimize damage;
- taking into account the necessity of maintaining the physical integrity of sealed containers and their contents;
- so that transportation containers would be opened by a U.S. Participant in the presence of Indian Customs;
- in a timely fashion and on a priority basis, and in the presence of authorized representatives of the United States of America as part of inspection activities if

U.S. Participants or Indian Representatives make such a request.

7.2.2.2 The Parties shall require U.S. Consignees to provide written assurances that the sealed containers referred to in paragraph 7.2.2.1 of this Article do not contain any freight or equipment unrelated to Launch Activities.

7.2.2.3 The Government of the United States of America shall require the U.S. Consignees to obtain, in cooperation with the Indian Consignees and prior to entry of Spacecraft, U.S. Related Equipment and/or U.S. Technical Data into the territory of the Republic of India, authorization from the Government of Republic of India for the anticipated itinerary of Spacecraft, U.S. Related Equipment, and/or U.S. Technical Data, including any reloading points and/or, in the event that aircraft are used, intermediate landing points.

7.2.2.4 The Government of Republic of India shall ensure that customs control of goods that are intended for use in Launch Activities and that are moved through the customs frontier of India follow a simplified and priority procedure subject to the provisions of paragraph 7.2.2.1 of this Article. For the purposes of this paragraph, "goods" shall mean Spacecraft, and any other equipment required for a launch, including any article, natural or synthetic substance or material, any delivered or manufactured product, including monitoring and testing equipment, as well as technologies in the form of information recorded on material media, required for their development, production, or use. The category of information also includes other information expressed in any material form, such as:

- computer software (including data bases);
- commercial secrets and know-how, particularly production documentation and technical characteristics; and
- research and development data.

7.2.4 In the event of an accident or crash of a vehicle transporting Spacecraft, U.S. Related Equipment, and/or U.S. Technical Data within the territory of the Republic of India, the provisions of Article 8 of this Agreement shall apply, as appropriate.

7.3 Transportation of Indian Equipment and Technical Data, including Customs Processing

The Government of the United States of America shall ensure that a simplified and priority procedure is followed for movement of Indian equipment, material and technical data which are required in connection with Launch Activities, to and from the territory of the United States of America and for import and export clearances as may be necessary.

7.4 Entry of U.S. Participants and Indian Representatives

U.S. Participants shall go through passport and customs control in India in accordance with the procedures defined by the laws and regulations of India. Indian Representatives shall go through passport and customs

control in the United States of America in accordance with the procedures defined by the laws and regulations of the United States of America.

7.4.1 The Government of Republic of India shall use its best efforts to facilitate the entry of U.S. Participants into the Republic of India for Launch Activities, including expediting appropriate visa processing for U.S. Participants.

7.4.2 The Government of the United States of America shall use its best efforts to facilitate the entry of Indian Representatives into the United States of America for Launch Activities, including expediting appropriate visa processing for Indian Representatives.

7.5 Preparations at Launch Related Facilities

7.5.1 The Government of Republic of India shall permit Indian Representatives to participate in unloading vehicles transporting Spacecraft, U.S. Related Equipment or U.S. Technical Data and delivering sealed containers to the Spacecraft preparation area at the technical complexes only if they are under the supervision of U.S. Participants. The Government of Republic of India shall not permit Indian Representatives access to such Spacecraft preparation areas for any purpose while Spacecraft or any U.S. Related Equipment is being tested and/or prepared for integration onto Launch Vehicles unless specially authorized by the Government of the United States of America.

7.5.2 Indian equipment shall be operated by Indian Representatives, except as otherwise agreed to by U.S. Participants and Indian Representatives.

7.5.3 The Parties shall permit only U.S. Participants to add propellant to Spacecraft and to test Spacecraft at the technical complexes. The Parties agree that Spacecraft and/or U.S. Related Equipment shall be accompanied by U.S. Participants during and after the integration of Spacecraft and Launch Vehicles and while Spacecraft, attached to Launch Vehicles, are being transferred to the launch pads.

7.6 Post-Launch Procedures.

The Parties shall ensure that only U.S. Participants are permitted to dismantle U.S. Related Equipment. The Parties shall ensure that such equipment, together with U.S. Technical Data, is returned to the United States of America or other location approved by the Government of the United States of America aboard vehicles approved by the Government of the United States of America.

Article 8

Launch Delay, Cancellation or Failure

8.1 Launch Delay.

In the event of a launch delay, the Parties shall ensure that access to Spacecraft, U.S. Related Equipment, and/or U.S. Technical Data is monitored by U.S. Participants. The Government of Republic of India shall ensure that U.S. Participants are present if Spacecraft are exposed or are removed from Launch Vehicles after such Spacecraft have been

mated to Launch Vehicles. The Parties shall ensure that such Spacecraft are monitored and accompanied by U.S. Participants from the launch pads, throughout the transport route to the Spacecraft preparation area, where, if need be, Spacecraft shall be repaired and await remating to Launch Vehicles. The provisions of Article 6 of this Agreement shall apply to any subsequent Launch Activities.

8.2 Launch Cancellation.

In the event of a launch cancellation, the Parties shall ensure that U.S. Participants are permitted to monitor access to Spacecraft, U.S. Related Equipment, and/or U.S. Technical Data. The Government of Republic of India shall ensure that U.S. Participants are present if Spacecraft are exposed or are removed from Launch Vehicles after such Spacecraft have been mated to Launch Vehicles. The Government of Republic of India shall ensure that Spacecraft shall be monitored and accompanied by U.S. Participants from the launch pads throughout the transport route to the Spacecraft preparation area, where they will await return to the United States of America or other location approved by the Government of the United States of America. The Parties shall ensure that the loading of Spacecraft, U.S. Related Equipment and/or U.S. Technical Data onto a vehicle is monitored by U.S. Participants, and that the vehicle is approved by the Government of the United States of America.

8.3 Launch Failure

8.3.1 In the event of a launch failure, the Government of Republic of India shall permit U.S. Participants to assist in the search for and recovery of any and all Spacecraft components and/or debris from all accident sites in locations subject to the jurisdiction or control of India in accordance with the safety procedures at the launch complex and the purposes of the Technology Security Plan. The Government of Republic of India shall ensure that U.S. Government emergency search personnel have access to the accident site. If there is reason to believe that the search and recovery of Spacecraft components and/or debris will affect the interests of a third state, the Parties shall consult expeditiously with the government of that state regarding the coordination of procedures for conducting search operations, without prejudice to the rights and obligations of all concerned states existing under international law, including those arising out of the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space of April 22, 1968.

8.3.2 The Government of Republic of India shall identify location(s), to be agreed to by the Parties, for the storage of identified Spacecraft components and/or debris, and the Government of Republic of India shall make these locations available to the U.S. Participants to be controlled in accordance with Article 6 of this Agreement. The Government of Republic of India shall ensure the immediate return of all identified Spacecraft components and/or debris recovered by Indian Representatives to U.S. Participants without such components or debris being studied or photographed in any way.

8.3.3 The Government of the United States of America and the Government of Republic of India agree to authorize the U.S. Consignees and Indian Consignees respectively, through licenses or permits, to provide, to the extent the national laws, security

interests and foreign policy of the respective states permit, information necessary to determine the cause of the accident.

Article 9 Implementation

- 9.1 In order to facilitate proper implementation of this Agreement and the accomplishment of its objectives, each Party shall designate authorized agencies to carry out its obligations under this Agreement:
 - 9.1.1 The Government of the United States of America hereby designates the Department of State and the Department of Defense as its authorized agencies.
 - 9.1.2 The Government of Republic of India hereby designates the Indian Space Research Organisation as its authorised agency;
- 9.2 A Party may change the designation of its designated authorized agencies by written notice to the other Party through diplomatic channels.
- 9.3 Any dispute between the Parties regarding the interpretation and implementation of this Agreement shall be resolved by consultation through diplomatic channels.

Article 10 Relation to Other Agreements

Cooperation under this Agreement shall take place without prejudice to the Parties' fulfillment of obligations under other international agreements to which they are a party.

Article 11 Special Arrangements

For launches that include additional payloads to which this Agreement does not apply, the procedures for applying the provisions of this Agreement, in particular any necessary amendments and/or supplements to this Agreement with respect to procedures for preparing Spacecraft at the technical complexes, integration with Launch Vehicles, and work at the launch pads, shall be agreed upon, if requested by any Party or its authorized agencies designated in accordance with Article 9 of this Agreement, and shall be included in the applicable Technology Security Plans in accordance with Article 5 of this Agreement.

Article 12 Entry into Force, Duration, and Termination

- 12.1 This Agreement shall enter into force on the date of signature and shall remain in force for a period of five years.
- 12.2 This Agreement may be amended and/or extended by written agreement between the Parties.

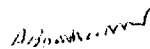
- 12.3 This Agreement may be terminated by either Party upon the expiration of three months from the date of the written notification indicating its intention to terminate this Agreement.
- 12.4 The obligations of the Parties set forth in this Agreement concerning security, disclosure and use of information, and return of Spacecraft, U.S. Related Equipment, and/or U.S. Technical Data from a delayed or canceled launch, or Spacecraft components and/or debris resulting from a failed launch to the United States of America or other location approved by the Government of the United States of America, and concerning the return to the Republic of India or other location approved by the Government of Republic of India of Launch Vehicles, Indian Related Equipment, and Indian Technical Data owing, inter alia, to a delayed launch, canceled launch, or failed launch, shall continue to apply after the expiration or termination of this Agreement.

IN WITNESS WHEREOF, the undersigned, being duly authorized thereto by their respective Governments, have signed this Agreement.

DONE at New Delhi this ^{20th} day of ^{July} (month), ²⁰⁰⁹ (year), in two originals each in the English and Hindi languages, both texts being authentic. In case of divergence in interpretation of the provisions of this Agreement, the English version shall prevail.



**For the Government of the
United States of America**
A. Peter Burleigh
Chargé d'Affaires a.i.
Embassy of the United States
of America



**For the Government of the
Republic of India**
A. Bhaskaranarayana
Scientific Secretary
Indian Space Research
Organization



Embassy of the United States of America

New Delhi, India

July 20, 2009

Dear Mr. Bhaskaranarayana:

I have the honor to refer to discussions between representatives of our two governments in the course of the negotiation of the Agreement Between the Government of the United States of America and the Government of the Republic of India on Technology Safeguards at All Facilities under the Jurisdiction and/or Control of the Government of the Republic of India Associated with the Launch of U.S. Licensed Spacecraft ("the Technology Safeguards Agreement" or "TSA"). Based on those discussions, the Government of the United States of America proposes the following understandings with regard to the launch of spacecraft¹ by India:

- Upon entry into force of the Technology Safeguards Agreement, the United States will grant export licenses, as appropriate, for spacecraft for non-commercial purposes for launch by India.
- Upon entry into force of a Commercial Space Launch Agreement (CSLA) between the United States and India, and in accordance with the terms of the TSA, the United States will consider and as appropriate grant export licenses for commercial spacecraft for launch by India.
- The United States and India will initiate and sustain consultations with a view to reviewing conditions in the market for commercial space launch services until such time as a CSLA is signed. During the period in which consultations are underway, the United States may decide to grant export licenses for commercial spacecraft for launch by India without the entry into force of a CSLA if the U.S. Government determines that government involvement in the Indian market for satellite launch services does not distort the conditions of competition in a manner that favors government suppliers of launch services.

Mr. A. Bhaskaranarayana
Scientific Secretary,
Indian Space Research Organization (ISRO),
Bangalore.

¹ For purposes of this note, "spacecraft" has the same meaning as in paragraphs 1.2 and 2.1 of the TSA.

- As set out in paragraph 3.7.5 of the Technology Safeguards Agreement, in determining whether grant of an export license is appropriate, nothing in the TSA will restrict the authority of the United States to take any action with respect to export licensing consistent with the laws, regulations, and policies of the United States.

The Government of the United States of America further proposes the following understanding:

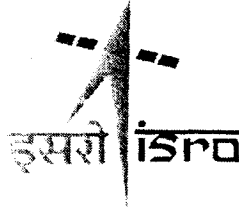
- Satellite transmission services are a separate service, distinct from spacecraft launch services. The United States and India will hold regular consultations on conditions affecting access to the Indian and U.S. satellite transmission services markets.

If the proposed understandings contained in this letter are acceptable to the Government of the Republic of India, this letter, together with your affirmative letter in reply, shall constitute an agreed understanding between our two governments that shall enter into force on the date of your letter.

Sincerely,



A. Peter Burleigh
Chargé d'Affaires a.i.



भारतीय अन्तरिक्ष अनुसंधान संगठन
अन्तरिक्ष विभाग
भारत सरकार
अन्तरिक्ष भवन
न्यू बी ई एल रोड, बेंगलूर - 560 094, भारत

Indian Space Research Organisation
Department of Space
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फैक्स/ Fax :

Ref:ISRO:SS:IC-31(TSA)

20 July, 2009

Excellency,

I have the honour to acknowledge the receipt of your letter dated 20 July, 2009 which refer to discussions between representatives of the Government of Republic of India and the Government of United States of America in the course of the negotiations of the agreement between the Government of the United States of America and the Government of the Republic of India on Technology Safeguards at All Facilities under the Jurisdiction and/or Control of the Government of the Republic of India Associated with the Launch of U.S. Licensed Spacecraft ("the Technology Safeguards Agreement" or "TSA") and which reads as follows:

"I have the honor to refer to discussions between representatives of our two governments in the course of the negotiation of the Agreement Between the Government of the United States of America and the Government of the Republic of India on Technology Safeguards at All Facilities under the Jurisdiction and/or Control of the Government of the Republic of India Associated with the Launch of U.S. Licensed Spacecraft ("the Technology Safeguards Agreement" or "TSA"). Based on those discussions, the Government of the United States of America proposes the following understandings with regard to the launch of spacecraft¹ by India:

- Upon entry into force of the Technology Safeguards Agreement, the United States will grant export licenses, as appropriate, for spacecraft for non-commercial purposes for launch by India.
- Upon entry into force of a Commercial Space Launch Agreement (CSLA) between the United States and India, and in accordance with

¹ For purposes of this note, "spacecraft" has the same meaning as in paragraphs 1.2 and 2.1 of the TSA.

the terms of the TSA, the United States will consider and as appropriate grant export licenses for commercial spacecraft for launch by India.

- The United States and India will initiate and sustain consultations with a view to reviewing conditions in the market for commercial space launch services until such time as a CSLA is signed. During the period in which consultations are underway, the United States may decide to grant export licenses for commercial spacecraft for launch by India without the entry into force of a CSLA if the U.S. Government determines that government involvement in the Indian market for satellite launch services does not distort the conditions of competition in a manner that favors government suppliers of launch services.
- As set out in paragraph 3.7.5 of the Technology Safeguards Agreement, in determining whether grant of an export license is appropriate, nothing in the TSA will restrict the authority of the United States to take any action with respect to export licensing consistent with the laws, regulations, and policies of the United States.

The Government of the United States of America further proposes the following understanding:

- Satellite transmission services are a separate service, distinct from spacecraft launch services. The United States and India will hold regular consultations on conditions affecting access to the Indian and U.S. satellite transmission services markets.

If the proposed understandings contained in this letter are acceptable to the Government of the Republic of India, this letter, together with your affirmative letter in reply, shall constitute an agreed understanding between our two governments that shall enter into force on the date of your letter."

I have the honour to inform Your Excellency that the Government of Republic of India accepts the proposed understandings contained in your letter, and to confirm that your letter and this affirmative letter in reply shall constitute an agreed understanding between our two Governments that shall enter into force on the date of this letter.

Sincerely,

A. Bhaskaranarayana
(A. Bhaskaranarayana)

H.E. A. Peter Burleigh
Charge d' Affaires a.i.
Embassy of the United States of America
New Delhi